```
administrador@lab-dacc-08:~$ ls /
bin   cdrom  etc    lib    lib64   lost+found  mnt  proc  run   snap  sys  usr
boot  dev    home   lib32  libx32  media       opt  root  sbin  srv   tmp  var
administrador@lab-dacc-08:~$ ls -flh /etc/passwd /etc/shadow /etc/group
-rw-r--r-- 1 root root    3,2K set 28 18:17 /etc/passwd
-rw-r----- 1 root shadow 1,9K set 28 18:10 /etc/shadow
-rw-r--r-- 1 root root    1,3K set 28 18:10 /etc/group
administrador@lab-dacc-08:~$ cat /etc/fstab
# /etc/fstab: static file system information.
#
# Use 'blkid' to print the universally unique identifier for a
# device; this may be used with UUID= as a more robust way to name devices
# that works even if disks are added and removed. See fstab(5).
#
# <file system> <mount point>    <type>  <options>         <dump>  <pass>
# / was on /dev/nvme0n1p8 during installation
UUID=bf741425-5ad0-4865-ad66-906781c30d34 /                ext4
errors=remount-ro 0          1
# /boot/efi was on /dev/nvme0n1p1 during installation
UUID=8E68-D768   /boot/efi        vfat    umask=0077        0          1
# /media/arquivos was on /dev/sda1 during installation
# swap was on /dev/nvme0n1p7 during installation
UUID=3f6a3ca4-191e-450b-be98-daca5bd7e2c7 none              swap      sw
0         0
/dev/disk/by-uuid/aa17929a-828c-4123-b88e-75c0748befbd /media/arquivos-linux auto
defaults 1 1
/dev/disk/by-uuid/B234703834700221 /media/arquivos auto
nosuid,nodev,nofail,x-gvfs-show 0 0
administrador@lab-dacc-08:~$ cat /etc/hostname
lab-dacc-08
administrador@lab-dacc-08:~$ cat /etc/protocols | grep UDP
udp 17   UDP       # user datagram protocol
udplite   136 UDPLite       # UDP-Lite [RFC3828]
administrador@lab-dacc-08:~$ cat /etc/services | grep -P "ssh|http\t|https|ircd"
# Updated from
https://www.iana.org/assignments/service-names-port-numbers/service-names-port-numbe
rs.xhtml .
ssh       22/tcp              # SSH Remote Login Protocol
http      80/tcp       www         # WorldWideWeb HTTP
https        443/tcp               # http protocol over TLS/SSL
ircd      6667/tcp          # Internet Relay Chat
administrador@lab-dacc-08:~$ cat /etc/shells
# /etc/shells: valid login shells
/bin/sh
/bin/bash
/usr/bin/bash
/bin/rbash
/usr/bin/rbash
/bin/dash
/usr/bin/dash
/usr/bin/screen
administrador@lab-dacc-08:~$ cat /etc/timezone
America/Porto_Velho
administrador@lab-dacc-08:~$ ls -alh ~
total 1,2M
drwxr-xr-x 36 administrador administrador 4,0K out 13 18:52   .
drwxr-xr-x  5 root          root          4,0K set 28 18:10   ..
drwxrwxr-x  4 administrador administrador 4,0K out 13 18:00   .android
drwxrwxr-x  3 administrador administrador 4,0K abr  3  2022   Android
```

```
drwxr-xr-x   4 administrador administrador 4,0K out   7 18:13   .anydesk
drwxr-xr-x   2 administrador administrador 4,0K abr   4   2022 'Área de Trabalho'
-rw-rw-r--   1 administrador administrador 133K out 13 18:47   ArquivosDoBin.txt
-rw-rw-r--   1 administrador administrador    80 out 13 18:50   ArquivoTeste.txt
-rw-------   1 administrador administrador   21K out 13 18:18   .bash_history
-rw-r--r--   1 administrador administrador   220 abr   2   2022   .bash_logout
-rw-r--r--   1 administrador administrador 3,9K out   5 16:04   .bashrc
drwxrwxr-x   2 administrador administrador 4,0K out   5 16:02   bin
drwxr-xr-x 25 administrador administrador 4,0K out 13 17:19   .cache
drwx------ 31 administrador administrador 4,0K out 13 19:01   .config
drwxr-xr-x   3 administrador administrador 4,0K abr   4   2022   Documentos
drwxr-xr-x   2 administrador administrador 4,0K out 13 19:01   Downloads
drwxrwxr-x   3 administrador administrador 4,0K abr   4   2022   .eclipse
-rw-------   1 administrador administrador    16 abr   7
2022   .emulator_console_auth_token
drwxrwxr-x   2 administrador administrador 4,0K out 11 15:46   Fernando
-rw-rw-r--   1 administrador administrador    80 out   5 16:09   .gitconfig
drwx------   3 administrador administrador 4,0K out 13 18:33   .gnupg
drwx------   4 administrador administrador 4,0K abr   3   2022   .hashcat
drwxr-xr-x   3 administrador administrador 4,0K out 13 18:37   Imagens
drwxrwxr-x   4 administrador administrador 4,0K abr   3   2022   .java
drwxr-xr-x   3 administrador administrador 4,0K abr   2   2022   .local
-rw-rw-r--   1 administrador administrador    88 out 13 18:51   LsStderr.txt
-rw-rw-r--   1 administrador administrador   105 out 13 18:52   LsStdoutStdErr.txt
-rw-rw-r--   1 administrador administrador    17 out 13 18:51   LsStdout.txt
drwxr-xr-x   2 administrador administrador 4,0K abr   3   2022   Modelos
drwx------   4 administrador administrador 4,0K abr   2   2022   .mozilla
drwxr-xr-x   2 administrador administrador 4,0K abr   2   2022   Música
drwxrwxr-x   7 administrador administrador 4,0K abr   4   2022   .nbi
drwxrwxr-x   2 administrador administrador 4,0K abr   4   2022   neanderlin64
drwxrwxr-x   3 administrador administrador 4,0K abr   4   2022   .netbeans
drwxrwxr-x   3 administrador administrador 4,0K abr   4   2022   netbeans-13
-rwxrwxrwx   1 administrador administrador    64 out 13 14:29   numero.sh
drwx------   4 administrador administrador 4,0K abr   3   2022   .nv
drwxr-xr-x 11 administrador administrador 4,0K abr   3   2022
NVIDIA_CUDA-11.4_Samples
-rw-rw-r--   1 administrador administrador 1,5K abr   3   2022   .nvidia-settings-rc
drwxrwxr-x   2 administrador administrador 4,0K out 11 16:00   palomakoba
drwx------   3 administrador administrador 4,0K abr   3   2022   .pki
-rw-r--r--   1 administrador administrador   807 abr   2   2022   .profile
drwxr-xr-x   2 administrador administrador 4,0K abr   2   2022   Público
-rw-------   1 administrador administrador     7 abr   4   2022   .python_history
drwxrwxr-x   3 administrador administrador 4,0K out   5 16:09   .repoconfig
-rw-rw-r--   1 administrador administrador   128 out   5 16:39   .repo_.gitconfig.json
-rw-rw-r--   1 administrador administrador 801K out 13 18:02   screenshot2.png
-rwxrwxrwx   1 administrador administrador    87 out 13 13:34   setimo.sh
drwx------   5 administrador administrador 4,0K abr   4   2022   snap
drwx------   2 administrador administrador 4,0K abr   2   2022   .ssh
-rw-r--r--   1 administrador administrador     0 abr   2   2022   .sudo_as_admin_successful
-rwxrwxrwx   1 administrador administrador    59 out 13 13:57   tamanho.sh
drwxrwxr-x   3 administrador administrador 4,0K out 13 14:56   .tldr
-rwxrwxrwx   1 administrador administrador    58 out 13 13:26   usuarios.sh
-rwxrwxrwx   1 administrador administrador   116 out 13 14:41   valor.sh
-rwxrwxrwx   1 administrador administrador   115 out 13 15:25   valor.sh.save
-rw-rw-r--   1 administrador administrador   142 abr   3   2022 'variables to activate
nvidia.txt'
drwxr-xr-x   3 administrador administrador 4,0K abr   4   2022   Vídeos
-rw-------   1 administrador administrador 1,4K out 13 18:40   .viminfo
drwxrwxr-x   3 administrador administrador 4,0K abr   3   2022   .vscode
```

```
administrador@lab-dacc-08:~$ echo $RANDOM
12262
administrador@lab-dacc-08:~$ echo $RANDOM
18423
administrador@lab-dacc-08:~$ echo $RANDOM
12622
administrador@lab-dacc-08:~$ echo $RANDOM
31851
administrador@lab-dacc-08:~$ echo "Timber Hearth" > /tmp/OuterWilds.txt
administrador@lab-dacc-08:~$ cat /tmp/OuterWilds.txt > /dev/stdout
Timber Hearth
administrador@lab-dacc-08:~$ cat /proc/diskstats | grep -v loop
 259        0 nvme0n1 54106 14952 4683763 10392 264112 74651 13362906 167614 0
68632 187303 0 0 0 0 7199 9296
 259        1 nvme0n1p1 313 974 15873 68 2 0 2 0 0 104 68 0 0 0 0 0
 259        2 nvme0n1p2 56 0 4160 49 0 0 0 0 0 40 49 0 0 0 0 0
 259        3 nvme0n1p3 56 0 4224 41 0 0 0 0 0 44 41 0 0 0 0 0
 259        4 nvme0n1p4 58 0 4176 33 0 0 0 0 0 36 33 0 0 0 0 0
 259        5 nvme0n1p5 58 0 4176 50 0 0 0 0 0 44 50 0 0 0 0 0
```

```
  259        6 nvme0n1p6 58 0 4176 53 0 0 0 0 0 44 53 0 0 0 0 0 0
  259        7 nvme0n1p7 87 0 6760 53 0 0 0 0 0 60 53 0 0 0 0 0 0
  259        8 nvme0n1p8 53320 13978 4636682 10022 264110 74651 13362904 167614
0 68540 177636 0 0 0 0 0 0
    8        0 sda 156275 0 5250776 535104 2764 43225 367888 10449 0 525816 546407
0 0 0 0 3 853
    8        1 sda1 156040 0 5246296 526546 2764 43225 367888 10449 0 517392
536996 0 0 0 0 0 0
```
administrador@lab-dacc-08:~$ iostat | grep -v loop

Comando 'iostat' não encontrado, mas poder ser instalado com:

sudo apt install sysstat

administrador@lab-dacc-08:~$ sudo apt install sysstat
[sudo] senha para administrador:
Lendo listas de pacotes... Pronto
Construindo árvore de dependências
Lendo informação de estado... Pronto
Pacotes sugeridos:
  isag
Os NOVOS pacotes a seguir serão instalados:
  sysstat
0 pacotes atualizados, 1 pacotes novos instalados, 0 a serem removidos e 110 não
atualizados.
É preciso baixar 448 kB de arquivos.
Depois desta operação, 1.511 kB adicionais de espaço em disco serão usados.
Obter:1 http://br.archive.ubuntu.com/ubuntu focal-updates/main amd64 sysstat amd64
12.2.0-2ubuntu0.1 [448 kB]
Baixados 448 kB em 0s (1.088 kB/s)
Pré-configurando pacotes ...
A seleccionar pacote anteriormente não seleccionado sysstat.
(Lendo banco de dados ... 344597 ficheiros e directórios actualmente instalados.)
A preparar para desempacotar .../sysstat_12.2.0-2ubuntu0.1_amd64.deb ...
A descompactar sysstat (12.2.0-2ubuntu0.1) ...
Configurando sysstat (12.2.0-2ubuntu0.1) ...

Creating config file /etc/default/sysstat with new version
update-alternatives: a usar /usr/bin/sar.sysstat para disponibilizar /usr/bin/sar (sar) em
modo auto
Created symlink /etc/systemd/system/multi-user.target.wants/sysstat.service →
/lib/systemd/system/sysstat
.service.
A processar 'triggers' para man-db (2.9.1-1) ...
A processar 'triggers' para systemd (245.4-4ubuntu3.15) ...
administrador@lab-dacc-08:~$ sudo apt install sysstat
Lendo listas de pacotes... Pronto
Construindo árvore de dependências
Lendo informação de estado... Pronto
sysstat já é a versão mais recente (12.2.0-2ubuntu0.1).
0 pacotes atualizados, 0 pacotes novos instalados, 0 a serem removidos e 110 não
atualizados.
administrador@lab-dacc-08:~$ iostat | grep -v loop
Linux 5.15.0-50-generic (lab-dacc-08)   13/10/2022   _x86_64_(12 CPU)

avg-cpu: %user   %nice %system %iowait   %steal   %idle
           2,12   0,01   0,92   0,21   0,00   96,74
```

| Device | tps | kB_read/s | kB_wrtn/s | kB_dscd/s | kB_read | kB_wrtn | kB_dscd |
| --- | --- | --- | --- | --- | --- | --- | --- |
| nvme0n1 | 24,12 | 177,57 | 506,27 | 0,00 | 2350701 | 6702053 | 0 |
| sda | 12,01 | 198,32 | 13,89 | 0,00 | 2625388 | 183944 | 0 |

```
administrador@lab-dacc-08:~$ cat /sys/block/nvme0n1/queue/hw_sector_size
512
administrador@lab-dacc-08:~$ cat /proc/cmdline
BOOT_IMAGE=/boot/vmlinuz-5.15.0-50-generic
root=UUID=bf741425-5ad0-4865-ad66-906781c30d34 ro quiet splash vt.handoff=7
administrador@lab-dacc-08:~$ cat /proc/loadavg
0.44 0.50 0.54 1/1131 29664
administrador@lab-dacc-08:~$ cat /proc/meminfo | grep Mem
MemTotal:       16187908 kB
MemFree:         6099240 kB
MemAvailable:   13159048 kB
administrador@lab-dacc-08:~$ cat /proc/uptime
13368.88 154867.52
administrador@lab-dacc-08:~$ cat /proc/version
Linux version 5.15.0-50-generic (buildd@lcy02-amd64-009) (gcc (Ubuntu
9.4.0-1ubuntu1~20.04.1) 9.4.0, GNU ld (GNU Binutils for Ubuntu) 2.34)
#56~20.04.1-Ubuntu SMP Tue Sep 27 15:51:29 UTC 2022
administrador@lab-dacc-08:~$ hexdump -C /bin/ls | head -3
00000000  7f 45 4c 46 02 01 01 00  00 00 00 00 00 00 00 00  |.ELF............|
00000010  03 00 3e 00 01 00 00 00  d0 67 00 00 00 00 00 00  |..>......g......|
00000020  40 00 00 00 00 00 00 00  c0 23 02 00 00 00 00 00  |@........#......|
administrador@lab-dacc-08:~$ cd /bin
administrador@lab-dacc-08:/bin$ ls
'['                              hp-clean                        ppmtotga
 2to3-2.7                        hp-colorcal                     ppmtouil
 411toppm                        hp-config_usb_printer
ppmtowinicon
 7z                              hp-doctor                       ppmtoxpm
 7za                             hp-firmware                     ppmtoyuv
 7zr                             hp-info
ppmtoyuvsplit
 aa-enabled                      hp-levels                       ppmtv
 aa-exec                         hp-logcapture                   pr
 aconnect                        hp-makeuri                      precat
 acpi_listen                     hp-pkservice                    preconv
 activity-log-manager            hp-plugin                       preparetips5
 acyclic                         hp-plugin-ubuntu                preunzip
 adb                             hp-probe                        prezip
 add-apt-repository              hp-query                        prezip-bin
 addpart                         hprof-conv
prime-select
 addr2line                       hp-scan
prime-supported
 alsabat                         hp-setup                        print
 alsaloop                        hp-testpage                     printafm
 alsamixer                       hp-timedate                     printenv
 alsatplg                        hsdb
printerbanner
 alsaucm                         htop
printer-profile
 amidi                           hwe-support-status              printf
 amixer                          i386                            prlimit
```

amuFormat.sh	i686-linux-gnu-pkg-config	profiles
animate	ibus	
protocoltojson		
animate-im6	ibus-daemon	prove
animate-im6.q16	ibus-setup	proxy
ant	ibus-table-createdb	prtstat
anydesk	iceauth	prune
anydesk-global-settings	ico	ps
anytopnm	icontopbm	ps2ascii
apg	iconv	ps2epsi
apgbfm	icotool	ps2pdf
aplay	id	ps2pdf12
aplaymidi	identify	ps2pdf13
appletviewer	identify-im6	ps2pdf14
apport-bug	identify-im6.q16	ps2pdfwr
apport-cli	idlj	ps2ps
apport-collect	iecset	ps2ps2
apport-unpack	ijs_pxljr	ps2txt
appres	ilbmtoppm	
psfaddtable		
appstreamcli	imagetops	
psfgettable		
apropos	im-config	
psfstriptable		
apt	imgtoppm	psfxtable
apt-add-repository	im-launch	psicc
apt-cache	import	psidtopgm
apt-cdrom	import-im6	pslog
apt-config	import-im6.q16	pstoedit
aptdcon	info	pstopnm
apt-extracttemplates	infobrowser	pstree
apt-ftparchive	infocmp	pstree.x11
apt-get	infotocap	ptar
apt-key	inputattach	ptardiff
apt-mark	install	ptargrep
apt-sortpkgs	install-info	ptx
apturl	install-printerdriver	pulseaudio
apturl-gtk	instmodsh	pwd
ar	intel-virtual-output	pwdx
arch	inxi	py3clean
arecord	ionice	py3compile
arecordmidi	iostat	py3versions
arm2hpdl	ip	pyclean
as	ipcmk	pycompile
asciitopgm	ipcrm	pydoc2
aseqdump	ipcs	pydoc2.7
aseqnet	ipod-read-sysinfo-extended	pydoc3
aspell	ipod-time-sync	pydoc3.8
aspell-import	ippfind	pygettext2
atktopbm	ipptool	
pygettext2.7		
atobm	iptables-xml	pygettext3
avahi-browse	irb	
pygettext3.8		
avahi-browse-domains	irb2.7	pyjwt3
avahi-publish	ischroot	python
avahi-publish-address	isdv4-serial-debugger	python2
avahi-publish-service	isdv4-serial-inputattach	python2.7
avahi-resolve	isodump	python3

avahi-resolve-address	isoinfo	python3.8
avahi-resolve-host-name	isovfy	
python3-futurize		
avahi-set-host-name	ispell-wrapper	
python3-pasteurize		
awk	jar	pyversions
axfer	jardetector	qalc
b2sum	jarsigner	qalculate
baobab	jarwrapper	
qalculate-gtk		
base32	java	
qpdldecode		
base64	javac	qrttoppm
basename	javadoc	
qt-faststart		
bash	javah	
quirks-handler		
bashbug	javap	qvlc
bc	jcmd	racc2.7
bccmd	jconsole	racc2y2.7
bcomps	jdb	rake
bdftopcf	jdeprscan	ranlib
bdftruncate	jdeps	rasttopnm
bioradtopgm	jexec	rawtopgm
bison	jfr	rawtoppm
bison.yacc	jhat	rbash
bitmap	jhindexer	rcp
bluemoon	jhsdb	rctest
bluetoothctl	jhsearch	
rdesktop-vrdp		
bluetooth-sendto	jimage	rdiffdir
bluetooth-wizard	jinfo	rdma
bmptopnm	jjs	rdoc
bmptoppm	jlink	rdoc2.7
bmtoa	jmap	readelf
boltctl	jmod	readlink
bootctl	join	realpath
brltty	join-dctrl	
recordmydesktop		
brltty-ctb	journalctl	red
brltty-trtxt	jpackage	regedit
brltty-ttb	jpegtopnm	
regedit-stable		
broadwayd	jpgicc	regsvr32
browse	jps	
regsvr32-stable		
brushtopbm	jq	remmina
bsd-from	jrunscript	
remmina-file-wrapper		
bsd-write	jsadebugd	
remmina-gnome		
btattach	jshell	rename.ul
btmgmt	json_pp	
rendercheck		
btmon	jstack	renice
bundle2.7	jstat	repo
bundler2.7	jstatd	reset
bunzip2	kactivities-cli	resizecons
busctl	kbdinfo	resizepart

busybox
resolvectl
bwrap
bzcat
bzcmp
rgb3toppm
bzdiff
bzegrep
rhythmbox
bzexe
rhythmbox-client
bzfgrep
bzgrep
bzip2
bzip2recover
bzless
bzmore
c++
c89
c89-gcc
c99
c99-gcc
cabextract
caca-config
cal
calendar
calibrate_ppa
canberra-gtk-play
cancel
captoinfo
cat
catchsegv
catdoc
catman
run-mailcap
catppt
cautious-launcher
run-with-aspell
cc
ccomps
cd-create-profile
cd-fix-profile
cd-iccdump
cd-it8
samba-regedit
c++filt
chacl
sane-find-scanner
chage
chardet3
chardetect3
chattr
chcon
check-language-support
cheese
chfn
chgrp
chmod

kbd_mode
kbookmarkmerger
kbroadcastnotification
kbuildsycoca5
kbxutil
kcmshell5
kcookiejar5
kdeconnect-app
kdeconnect-cli
kdeconnect-handler
kdeconnect-indicator
kdeconnect-settings
kdeconnect-sms
kdecp5
kded5
kdeinit5
kdeinit5_shutdown
kdeinit5_wrapper
kdemv5
kdenlive
kdenlive_render
kde-open5
keditbookmarks
keditfiletype5
kernel-install
kerneloops-submit
keyring
keytool
kglobalaccel5
kiconfinder5
kill
killall
kioclient5
kmimetypefinder5
kmod
kmodsign
kpackagelauncherqml
kpackagetool5
kquitapp5
kreadconfig5
kshell5
kstart5
ksvgtopng5
ktelnetservice5
ktraderclient5
ktrash5
kwalletd5
kwallet-query
kwrapper5
kwriteconfig5

rev
rfcomm
rgrep
ri
ri2.7
rletopnm
rlogin
rm
rmdir
rmic
rmid
rmiregistry
rnano
routef
routel
rpcgen
rrsync
rsh
rstart
rstartd
rsync
rtstat
ruby
ruby2.7
runcon
run-parts
rview
rvim
rvlc
rygel
sadf
samba-tool
sar
sar.sysstat
savelog
sbattach
sbigtopgm
sbkeysync
sbsiglist
sbsign
sbvarsign
sbverify

choom	l2ping	
scanimage		
chown	l2test	sccmap
chrome-gnome-shell	laptop-detect	schedtool
chromium-browser	last	
schemagen		
chrt	lastb	scp
chsh	lastlog	
scp-dbus-service		
chvt	lavadecode	screen
cifsiostat	lcf	screendump
ciptool	ld	script
circo	ld.bfd	scriptreplay
ckbcomp	ldd	sdiff
cksum	ld.gold	sdl-config
clear	leaftoppm	sdptool
clear_console	lefty	seahorse
clhsdb	less	sed
cluster	lessecho	see
cmp	lessfile	
select-default-iwrap		
cmuwmtopbm	lesskey	
select-editor		
code	lesspipe	
sensible-browser		
codepage	lex	
sensible-editor		
col	lexgrog	
sensible-pager		
colcrt	libnetcfg	sensors
colormgr	libpng16-config	
sensors-conf-convert		
colrm	libpng-config	seq
column	libreoffice	serialver
comm	libwacom-list-local-devices	servertool
compare	link	
session-migration		
compare-im6	linkicc	sessreg
compare-im6.q16	linux32	setarch
compiz	linux64	setfacl
compiz-decorator	linux-boot-prober	setfont
compose	linux-check-removal	
setkeycodes		
composite	linux-update-symlinks	setleds
composite-im6	linux-version	setlogcons
composite-im6.q16	lispmtopgm	
setmetamode		
conjure	listres	setpci
conjure-im6	ln	setpriv
conjure-im6.q16	lneato	setsid
convert	lnstat	setterm
convert-im6	loadkeys	setupcon
convert-im6.q16	loadunimap	
setxkbmap		
corelist	localc	sfdp
cp	locale	sftp
cpan	locale-check	sg
cpan5.30-i386-linux-gnu	localectl	sgitopnm
cpan5.30-x86_64-linux-gnu	localedef	sh

cpio	lodraw	sha1sum
cpp	loffice	sha224sum
cpp-8	lofromtemplate	
sha256sum		
cpp-9	logger	
sha384sum		
c_rehash	login	sha512sum
crontab	loginctl	sharesec
csplit	logisim	shasum
ctstat	logname	shotwell
cupstestppd	loimpress	
showconsolefont		
curl	lomath	showkey
cut	look	showrgb
cvlc	lorder	shred
cvt	loweb	shuf
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dash	lowriter	sirtopnm
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dbus-cleanup-sockets	lpoptions	skill
dbus-daemon	lpq	slabtop
dbus-launch	lpr	sldtoppm
dbus-monitor	lprm	sleep
dbus-run-session	lp_solve	slogin
dbus-send	lpstat	slxdecode
dbus-update-activation-environment	ls	smbcontrol
dbus-uuidgen	lsattr	smbpasswd
dbwrap_tool	lsblk	smbstatus
dbxtool	lsb_release	smproxy
dc	lscpu	snap
dconf	lshw	snapctl
dd	lsinitramfs	snapfuse
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debconf	lslogins	soffice
debconf-apt-progress	lsmem	
software-properties-gtk		
debconf-communicate	lsmod	sort
debconf-copydb	lsns	sort-dctrl
debconf-escape	lsof	sotruss
debconf-set-selections	lspci	spctoppm
debconf-show	lspgpot	spd-conf
debian-distro-info	lsusb	spd-say
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deb-systemd-invoke	luit	
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deja-dup	lwp-download	
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delaunay	lwp-dump	splain
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desktop-file-edit	lz	sprof
desktop-file-install	lz4	spumux
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devdump	lz4cat	
spuunmux		
df	lzcat	sqldiff
dfu-tool	lzcmp	sqlite3

dh_bash-completion	lzdiff	ss
dh_dkms	lzegrep	ssh
dh_installtex	lzfgrep	ssh-add
dh_installxmlcatalogs	lzgrep	ssh-agent
dh_perl_openssl	lzless	ssh-argv0
dh_python2	lzma	
ssh-copy-id		
diff	lzmainfo	sshfs
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diffimg	lzop	
ssh-import-id-gh		
dig	m2300w	
ssh-import-id-lp		
dijkstra	m2300w-wrapper	
ssh-keygen		
dir	m2400w	
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start-pulseaudio-x11		
dirmngr-client	make	startx
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dirsplit	makeinfo	static-sh
display	mako-render	stdbuf
display-im6	man	stl2gts
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distro-info	manpath	
strace-log-merge		
dmesg	man-recode	stream
dm-tool	mapscrn	
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dmtracedump	mattrib	
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dnsdomainname	mawk	strings
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dot	mcd	su
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dotty	mcomp	sudoedit
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dpkg-architecture	mcopy	sum
dpkg-buildflags	md5sum	svlc
dpkg-buildpackage	md5sum.textutils	
symcryptrun		
dpkg-checkbuilddeps	mdatopbm	sync
dpkg-deb	mdel	syslinux
dpkg-distaddfile	mdeltree	
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dpkg-divert	mdig	
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dpkg-genbuildinfo	mdir	
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dpkg-genchanges	mdu	
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totem-video-thumbnailer
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fc-cat
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fc-conflist
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fgconsole                    nemo-desktop                  twopi
fgrep                        nemo-open-with
txixml2texi
fiascotopnm                  neotoppm                      tzselect
file                         neqn                          ua
file2brl                     net
ubuntu-advantage
file-roller                  netcat                        ubuntu-bug
fincore                      netkit-ftp
ubuntu-core-launcher
find                         networkctl
ubuntu-distro-info
findmnt                      networkd-dispatcher
ubuntu-drivers
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fitstopnm                    ngettext
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flex                         nice                          ucf
flex++                       nisdomainname                 ucfq
flock                        nl                            ucfr
fmt                          nm                            ucs2any
fold                         nm-applet                     udevadm
fonttosfnt                   nmblookup                     udisksctl
foo2ddst                     nmcli                         ul
foo2ddst-wrapper             nm-connection-editor
ulockmgr_server
foo2hbpl2                    nm-online                     umax_pp
foo2hbpl2-wrapper            nmtui                         umount
foo2hiperc                   nmtui-connect                 uname
foo2hiperc-wrapper           nmtui-edit
unattended-upgrade
foo2hp                       nmtui-hostname
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foo2hp2600-wrapper           nohup
uncompress
foo2lava                     nop                           unexpand
foo2lava-wrapper             notify-send                   unflatten
foo2oak                      nproc
unicode_start
foo2oak-wrapper              nroff
unicode_stop
foo2qpdl                     nsenter                       uniq
foo2qpdl-wrapper             nslookup                      unity
foo2slx                      nstat
unity-control-center
foo2slx-wrapper              nsupdate
unity-scope-loader
foo2xqx                      ntfs-3g
unity-settings-daemon
foo2xqx-wrapper              ntfs-3g.probe                 unlink
foo2zjs                      ntfscat                       unlz4
foo2zjs-icc2ps               ntfscluster                   unlzma
foo2zjs-pstops               ntfscmp
unmkinitramfs
foo2zjs-wrapper              ntfsdecrypt                   unopkg
foomatic-rip                 ntfsfallocate                 unpack200
fprintd-delete               ntfsfix                       unpigz
fprintd-enroll               ntfsinfo                      unshare
```

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fprintd-list                  ntfsls                      unsquashfs
fprintd-verify                ntfsmove                    unxz
free                          ntfsrecover                 unzip
from                          ntfssecaudit                unzipsfx
fstopgm                       ntfstruncate
update-alternatives
ftp                           ntfsusermap
update-desktop-database
funzip                        ntfswipe
update-manager
fuser                         numfmt
update-mime-database
fusermount                    nvidia-bug-report.sh
update-notifier
futurize                      nvidia-cuda-mps-control
update-perl-sax-parsers
fwupdagent                    nvidia-cuda-mps-server      upower
fwupdate                      nvidia-debugdump            uptime
fwupdmgr                      nvidia-detector
usb-creator-gtk
fwupdtool                     nvidia-ngx-updater          usb-devices
g++                           nvidia-persistenced
usbhid-dump
g3topbm                       nvidia-settings
usb_printerid
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gamemoded                     nvidia-smi                  users
gamemoderun                   nvidia-xconfig
utmpdump
gamma4scanimage               nvlc                        uuidgen
gapplication                  oakdecode                   uuidparse
gatttool                      obexctl                     uz
gc                            objcopy                       VBox
gcalccmd                      objdump
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gcc                           oclock
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gcc-nm                        on_ac_power
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gcc-ranlib                    opldecode
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gcore                         orca-dm-wrapper             vboxsdl
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gcr-viewer
gdb
gdb-add-index
gdbserver
gdbtui
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VirtualBox
gdbus-codegen
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gdk-pixbuf-csource
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gdk-pixbuf-thumbnailer
gdmflexiserver
vmwarectrl
gdm-screenshot
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gencat
wbmptopbm
genisoimage
genresscript
geqn
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gist-paste                      pbmtobbnbg
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git                             pbmtocmuwm                    winedbg
git-receive-pack                pbmtoepsi
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git-shell                       pbmtoepson                    winefile
git-upload-archive              pbmtog3
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gml2gv                          pbmtoptx                      wrestool
gnat                            pbmtowbmp                     write
gnat-9                          pbmtox10bm                    wsgen
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gnatchop-9                      pbmupc                        x11perf
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gnatgcc                         pdb2
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gperf	pinentry-gnome3
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x86_64-linux-gnu-objcopy	
gpgcompose	ping4
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gpgparsemail	pjtoppm	
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gpgsm	pkaction	
x86_64-linux-gnu-size		
gpgsplit	pkcheck	
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gpgtar	pkcon	
x86_64-linux-gnu-strip		
gpgv	pkexec	
x86_64-pc-linux-gnu-pkg-config		
gpg-wks-server	pkg-config	xargs
gpg-zip	pkill	xauth
gpic	pkmon	xbiff
gprof	pkttyagent	xbmtopbm
gpu-manager	pl2pm	xbrlapi
graphml2gv	plasmapkg2	xcalc
grep	playonlinux	xclipboard
grep-aptavail	playonlinux-pkg	xclock
grep-available	pldd	xcmsdb
grep-dctrl	plog	xconsole
grep-debtags	plymouth	
xcursorgen		
grepjar	pmap	xcutsel
grep-status	pngcrush	
xdg-dbus-proxy		
gresource	pngfix	
xdg-desktop-icon		
groff	png-fix-itxt	
xdg-desktop-menu		
grog	pngtopnm	
xdg-email		
grops	pnm2ppa	
xdg-icon-resource		
grotty	pnmalias	xdg-mime
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grub-editenv	pnmcat	
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grub-file	pnmcolormap	
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grub-fstest	pnmcomp	
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grub-glue-efi	pnmconvol	
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grub-kbdcomp	pnmcrop	
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grub-menulst2cfg	pnmcut	xditview
grub-mkfont	pnmdepth	xdpyinfo
grub-mkimage	pnmenlarge	xdriinfo
grub-mklayout	pnmfile	xedit
grub-mknetdir	pnmflip	Xephyr
grub-mkpasswd-pbkdf2	pnmgamma	xev
grub-mkrelpath	pnmhisteq	xeyes
grub-mkrescue	pnmhistmap	xfd
grub-mkstandalone	pnmindex	xfontsel
grub-mount	pnminterp	xgamma
grub-ntldr-img	pnminterp-gen	xgc
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grub-syslinux2cfg	pnmmontage	xinit
gs	pnmnlfilt	xinput
gsbj	pnmnoraw	xjc
gsdj	pnmnorm	xkbbell
gsdj500	pnmpad	xkbcomp
gsettings	pnmpaste	xkbevd
gslj	pnmpsnr	xkbprint
gslp	pnmquant	xkbvleds
gsnd	pnmremap	
xkbwatch		
gst	pnmrotate	xkeystone
gst-convert	pnmscale	xkill
gst-device-monitor-1.0	pnmscalefixed	xload
gst-discoverer-1.0	pnmshear	xlogo
gst-doc	pnmsmooth	xls2csv
gst-inspect-1.0	pnmsplit	xlsatoms
gst-launch-1.0	pnmtile	xlsclients
gst-load	pnmtoddif	xlsfonts
gst-package	pnmtofiasco	xmag
gst-play-1.0	pnmtofits	xman
gst-profile	pnmtojpeg	xmessage
gstreamer-codec-install	pnmtopalm	xmlcatalog
gst-reload	pnmtoplainpnm	xmllint
gst-remote	pnmtopng	
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gst-sunit	pnmtops	xmore
gst-typefind-1.0	pnmtorast	Xorg
gtbl	pnmtorle	xpmtoppm
gtester	pnmtosgi	xprop
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x-session-manager		
gtk-launch	pod2man	xset
gtk-query-settings	pod2texi	xsetmode
gtk-update-icon-cache	pod2text	xsetpointer
gtk-window-decorator	pod2usage	xsetroot
gts2dxf	podchecker	
xsetwacom		
gts2oogl	podselect	xsltproc
gts2stl	poff	xsm
gts2xyz	policytool	xstdcmap
gtscheck	pon	xsubpp
gtscompare	POST	
x-terminal-emulator		
gts-config	ppdc	xvidtune
gtstemplate	ppdhtml	xvinfo
gunzip	ppdi	
xvminitoppm		
gv2gml	ppdmerge	
Xwayland		
gv2gxl	ppdpo	xwd
gvcolor	pphs	xwdtopnm
gvfs-cat	ppm3d	
x-window-manager		
gvfs-copy	ppmbrighten	xwininfo

```
gvfs-info                      ppmchange                         xwud
gvfs-less                      ppmcie
x-www-browser
gvfs-ls                        ppmcolormask                      xxd
gvfs-mime                      ppmcolors                         xz
gvfs-mkdir                     ppmdim                            xzcat
gvfs-monitor-dir               ppmdist                           xzcmp
gvfs-monitor-file              ppmdither                         xzdiff
gvfs-mount                     ppmfade                           xzegrep
gvfs-move                      ppmflash                          xzfgrep
gvfs-open                      ppmforge                          xzgrep
gvfs-rename                    ppmhist                           xzless
gvfs-rm                        ppmlabel                          xzmore
gvfs-save                      ppmmake
y2racc2.7
gvfs-set-attribute             ppmmix                            yacc
gvfs-trash                     ppmnorm                           yasm
gvfs-tree                      ppmntsc                           ybmtopbm
gvgen                          ppmpat                            yelp
gvmap                          ppmquant                          yes
gvmap.sh                       ppmquantall
ypdomainname
gvpack                         ppmqvga                           ytasm
gvpr                           ppmrainbow
yuvsplittoppm
gxl2dot                        ppmrelief                         yuvtoppm
gxl2gv                         ppmshadow                         zcat
gzexe                          ppmshift                          zcmp
gzip                           ppmspread                         zdiff
h2ph                           ppmtoacad                         zdump
h2xs                           ppmtobmp                          zegrep
hashcat                        ppmtoeyuv
zeisstopnm
hbpldecode                     ppmtogif
zeitgeist-daemon
hciattach                      ppmtoicr
zeitgeist-datahub
hciconfig                      ppmtoilbm                         zenity
hcitool                        ppmtojpeg                         zfgrep
hd                             ppmtoleaf                         zforce
head                           ppmtolj                           zgrep
HEAD                           ppmtomap                          zip
helpztags                      ppmtomitsu                        zipcloak
hex2hcd                        ppmtompeg
zipdetails
hexdump                        ppmtoneo                          zipgrep
hipercdecode                   ppmtopcx                          zipinfo
hipstopgm                      ppmtopgm                          zipnote
host                           ppmtopi1                          zipsplit
hostid                         ppmtopict                         zjsdecode
hostname                       ppmtopj                           zless
hostnamectl                    ppmtopuzz                         zmore
hp-align                       ppmtorgb3                         znew
hp-check                       ppmtosixel
administrador@lab-dacc-08:/bin$ bash
administrador@lab-dacc-08:/bin$ cd /tmp
administrador@lab-dacc-08:/tmp$ exit
exit
administrador@lab-dacc-08:/bin$ /bin/date
```

```
qui 13 out 2022 19:11:19 -04
administrador@lab-dacc-08:/bin$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/b
in:/usr/local/cuda/bin:/home/administrador/bin/:/home/administrador/bin/
administrador@lab-dacc-08:/bin$ df -h
Sist. Arq.        Tam. Usado Disp. Uso% Montado em
udev              7,7G      0  7,7G    0% /dev
tmpfs             1,6G   3,7M  1,6G    1% /run
/dev/nvme0n1p8    101G    33G   64G   34% /
tmpfs             7,8G   256K  7,8G    1% /dev/shm
tmpfs             5,0M   4,0K  5,0M    1% /run/lock
tmpfs             7,8G      0  7,8G    0% /sys/fs/cgroup
/dev/loop0        128K   128K      0 100% /snap/bare/5
/dev/loop3        392M   392M      0 100% /snap/gimp/383
/dev/loop2         56M    56M      0 100% /snap/core18/2566
/dev/loop1        143M   143M      0 100% /snap/chromium/2105
/dev/loop4        165M   165M      0 100% /snap/gnome-3-28-1804/161
/dev/loop5        347M   347M      0 100% /snap/gnome-3-38-2004/115
/dev/loop6         92M    92M      0 100% /snap/gtk-common-themes/1535
/dev/loop7         62M    62M      0 100% /snap/core20/1434
/dev/loop9        115M   115M      0 100% /snap/core/13741
/dev/loop12       522M   522M      0 100% /snap/gimp/393
/dev/loop11        56M    56M      0 100% /snap/core18/2344
/dev/loop8        144M   144M      0 100% /snap/chromium/2117
/dev/loop10       115M   115M      0 100% /snap/core/13886
/dev/loop15       347M   347M      0 100% /snap/gnome-3-38-2004/119
/dev/loop18        64M    64M      0 100% /snap/core20/1623
/dev/loop17        46M    46M      0 100% /snap/snap-store/599
/dev/loop13        55M    55M      0 100% /snap/snap-store/558
/dev/loop19        48M    48M      0 100% /snap/snapd/17029
/dev/loop14        66M    66M      0 100% /snap/gtk-common-themes/1519
/dev/loop20        48M    48M      0 100% /snap/snapd/16778
/dev/loop16       256K   256K      0 100% /snap/gtk2-common-themes/13
/dev/nvme0n1p1    496M    81M  416M   17% /boot/efi
/dev/sda1         466G   232G  235G   50% /media/arquivos
tmpfs             1,6G    20K  1,6G    1% /run/user/125
tmpfs             1,6G    72K  1,6G    1% /run/user/1000
administrador@lab-dacc-08:/bin$ cd ~
administrador@lab-dacc-08:~$ touch /tmp/ArquivoTouch.txt
administrador@lab-dacc-08:~$ ls -lh /tmp/ArquivoTouch.txt
-rw-rw-r-- 1 administrador administrador 0 out 13 19:12 /tmp/ArquivoTouch.txt
administrador@lab-dacc-08:~$ uname -a
Linux lab-dacc-08 5.15.0-50-generic #56~20.04.1-Ubuntu SMP Tue Sep 27 15:51:29 UTC
2022 x86_64 x86_64 x86_64 GNU/Linux
administrador@lab-dacc-08:~$ who
administrador :1              2022-10-13 15:31 (:1)
```